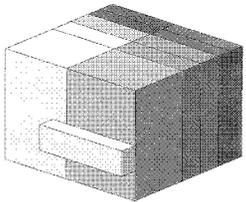


## I. Regulation/Standard Issues

### Compatibility:

**IIHS Benefits Study to be Published** – As communicated informally to the Front-to-Front (FtF) TWG, IIHS repeated its analysis of FARS data for vehicles designed to the voluntary geometric compatibility requirements using an enhanced dataset. Findings were similar to the original study; approximately 19% fatality reduction exists due to the design changes. TMA expects the formal publication of these results by the end of June.

**FtF TWG Final Report of Load Cell Wall Research** – The FtF TWG circulated its final draft report detailing all full scale testing completed to support development of a full width deformable barrier test using a load cell wall. Ultimately, the TWG observed that the barrier has the potential to assess vehicle interaction performance in frontal impacts, and the report incorporated all of Toyota's requested revisions. The report will be forwarded to the management committee for approval at its July 23<sup>rd</sup> meeting.



**GM/Toyota Meet to Discuss MDB Development Status; Shift Focus to ODB** – GM and Toyota met during the ESV Conference in Lyon, France to report results from full scale vehicle-to-vehicle and vehicle-to MDB evaluations. Final conclusions are not favorable to the MDB, specifically, the MDB seems deficient in its replication of passenger car crush and powertrain kinetics. Therefore, GM and Toyota agreed to complete the MDB test analyses, prepare a status report to NHTSA and the FtF TWG, and shift focus to examine the Toyota-developed offset deformable barrier (ODB).

**2008 SAE World Congress: GM/Toyota Abstract Draft** – GM and Toyota submitted an abstract for the 2008 SAE World Congress entitled, "Development of MDB for Compatibility in Frontal Impacts - Summary of Theoretical and Experimental Evaluations". Final paper will be submitted by September 30<sup>th</sup>.

**Alliance WG Considers Potential Conflict of IIHS Frontal Pole Test and Compatibility** – The Alliance initiated discussion on member concerns with IIHS plans to implement a 40 mph frontal pole test, focusing on field relevance and design conflict for compatibility goals. Initial member feedback includes concerns regarding increased vehicle mass and relative infrequency of severe narrow object collisions in the field. The WG will pursue additional data analysis and members are encouraged to share their perspectives on general design implications.

### LATCH-CRS Issues:

**Alliance 208 LATCH WG; CRS Transponder Reconsideration** – As directed by the Alliance SPC and strongly supported by BMW, the Alliance LATCH WG was tasked to reconsider the possibility of proposing a transponder system (tagging) for the detection of CRSs in the front passenger seat of vehicles. Although TMA-DC objected to exploring the idea at this time, citing the priority of more urgent CRS-related issues, the Alliance WG plans for a general discussion with the Automotive Occupant Restraints Council (AORC) and the Juvenile Products Manufacturers Association (JPMA) at the next joint WG meeting on CRS issues.

**Alliance Letter on LATCH and Vehicle Belt Simultaneous Use** – As part of its commitment to respond to the advocacy community and NHTSA regarding a number of current CRS issues, the Alliance, along with ACTS and AIAM, submitted a letter to *Safe*

*Ride News* (an independent child occupant safety publication) highlighting the continued efforts and positions of its members regarding the use of the LATCH system in conjunction with the vehicle safety belts to restrain a child occupant and CRS. In general, the letter supports the use of booster seats per the instructions of the CRS manufacturer, but cannot endorse routing the belt through the booster simultaneously using LATCH anchors, which is considered misuse.

**Increasing Evidence of Heavier CRS Trend** – Consistent with indications from U.S. advocacy groups and the work of the joint industry working group, the Canadian Government issued an Interim Order that allows the design of forward-facing CRSs that include a harness to accommodate children up to 30 kg (65 lbs). This harmonization with the FMVSS No. 213 weight limit is a possible indication that there is also a growing Canadian market demand for higher (child weight) capacity CRSs (similar to the U.S. trend). TMC and TMA-DC continue regular discussions on the implications of this trend on the vehicle LATCH system.

**FMVSS 202a, Petition for Reconsideration**– The Alliance head restraint WG drafted and submitted a petition for reconsideration to address two minor issues, including a seating clarification issue raised by TMC. TMC also identified a concern regarding seat urethane foam recovery time between tests; however, since this issue was not raised earlier during the rulemaking process, procedurally, a petition for rulemaking may have to be submitted to initiate a new rulemaking. TMA-DC and TMC are investigating the need to petition for rulemaking.

**Early Warning Reporting (EWR) – Amended Final Rule** —NHTSA issued a final rule amending the requirements of Early Warning Reporting, 49 CFR 579. The effective date of the rule is June 29. This rulemaking is the first phase of review of the EWR requirements specified under the TREAD Act. This rule adds a definition of a “Product Evaluation Report” and excludes it from submission, amends the definition of a “Fire,” and limits the updating of reports of death and injury to one year after the first submission.

**FMVSS 206 Door Locks, Petition for Reconsideration Amendment** – The Alliance 206 WG submitted an amendment to the Alliance's March petition for reconsideration in order to request that any lead-time and phase-in period for the FMVSS 206 upgrade coincide with the FMVSS 214 final rule, which is expected in September 2007. The Alliance is requesting a 20/50/100 phase-in for FMVSS 206 beginning on Sept 1, 2011.

**Occupant Containment** – The Alliance/AIAM/AORC working group compiled and provided to NHTSA a list of vehicles with standard or optional rollover sensing curtain shield airbags for 2008 MY vehicles, in order for the agency to continue their research testing. TMC and TMA-DC assembled and provided this information for Toyota/Lexus products to the Alliance.

**Amendments to Parts 573, 577, and 579** – NHTSA published some amendments to Parts 573, 577, and 579 to specify the new physical address for correspondence with the agency, since the agency has relocated to a new facility. It also adds or modifies email addresses and some personnel titles. None of these amendments impose or relax any substantive requirements or burdens on manufacturers.

## **II. Other Issues**

**GAO Meeting Regarding Safety Trends** - Senator Inouye asked the Government Accountability Office (GAO) to look at how the U.S. DOT identifies and responds to trends that could affect highway fatality reduction by the year 2020. The GAO met the Alliance to have an open discussion about their questions, and also asked Toyota to follow up with additional advanced safety technology information.

**TMA Invited to Join Alcohol Interlock Blue Ribbon Panel** – The chairman of ACTS sent TMA a letter requesting that TMA join the “Blue Ribbon Panel” for the development of in-vehicle Alcohol interlock Detection technologies, chaired by Sue Ferguson (formerly of IIHS). The panel will provide expert advice to assist a research effort to explore the feasibility of in-vehicle alcohol detection devices. Initial funding will be provided by the Alliance and NHTSA, and the first meeting is scheduled for July 17 in Washington D.C.

**CAFÉ Report Alleges No Safety Trade Off** – The International Council on Clean Transportation (ICCT) and Resources for the (RFF) Future released a report claiming that vehicles can be made smaller and lighter to improve fuel economy without compromising safety. TMA’s assessment is that the report speaks in vague and general terms, and over reaches in its conclusions. IIHS participated in the study, but has refused to back the final report.

**NHTSA visits TMC Fuji test Center** – TMA accompanied NHTSA Administrator Nason and several key staff in their visit to TMC’s test facility to hear an overview of Toyota’s safety vision, see the new driving simulator, and experience hands-on driving of some new active safety technologies potentially bound for the US. We also presented some important regulatory roadblocks to moving forward on several technologies. Ms. Nason pledged to help us to insure regulations were not impeding safety advances, and also offered to work with the FCC if TMC could provide demo vehicles.

**NHTSA Brake Assist Research** –NHTSA contacted TMA seeking Toyota's support for a NHTSA research project on brake assist (BA) at their testing facility in Ohio. For this research, NHTSA requested our help in disabling the BA in a 2003 Toyota 4Runner, but since BA is an integrated part of the vehicle's braking system, a custom ECU must be made for NHTSA, and TMC has agreed to develop one.

**NHTSA Upgrades NASS Format--** TMA attended an Alliance sponsored NASS training session on the new XML data format for NASS-CDS, focusing on accessing the new online viewer website and importing CDS data for analysis.

**ITS America Annual Meeting** – TMC IT/ITS Planning Division, TEMA and TMA attended the annual meeting in California, where USDOT officials from NHTSA, FHWA, and ITS JPO echoed the importance of implementing ITS to improve safety, mobility and productivity.

**FCC Spectrum Policy Summit** – The summit discussed the use of 700 MHz for public safety, as 700 MHz will be available for the public sector in Feb ‘09 (as mandated by Congress). The panel discussed the need for establishing a national strategy, cooperation amongst regions, the use of commercial technology, and increased funding.

**Quiet Cars (Hybrid Vehicle Safety)** – In support of the recent concerns over quiet vehicles from the National Federation for the Blind, the Alliance is expressing support for, and pledging participation in, a new activity within the SAE to explore the feasibility of an SAE recommended practice concerning the emission of a “friendly” sound that would assist the visually impaired in detecting accelerating and decelerating HEVs and EVs.

**Alliance 2008 Preliminary Research Proposals Circulated for Review** – In accordance with the Alliance budgeting process for fiscal year '08, the Alliance Safety Research Subcommittee (SRS) circulated two human subject research proposals for review and comment by SRS members.

**VIIC Policy Committee** - TMA submitted Toyota's comments, which incorporated feedback from TMC and TEMA, to the VIIC regarding a cost benefits analysis report conducted by Volpe. We cautioned that the 3-year phase-in schedule described in the report, which assumes all new vehicles will be equipped with DSRC by 2013, is too optimistic and the assumption should consider other critical factors such as vehicle model change. VIIC members are skeptical about the report in general, and the Committee provided VIIC comments.

**VII WG Meeting** – TMA attended the quarterly VII WG meeting with over 40 representatives from federal/state governments, OEMs, and contractors. Members agreed to disband all sub-committees to form new smaller task groups. Task Group meetings, VII WG and VII PMR will be held simultaneously in the future. USDOT ITS JPO is seeking stronger partnerships in national VII activity, which gives the auto industry and Toyota a good opportunity to influence the direction of the activity more effectively.

**FCC 77GHz issue (Stationary Vehicle Radar Emission)** - In order to facilitate effective coordination amongst Toyota groups, TMA summarized the status of Toyota's activity, and proposed an action plan for a potential 77 GHz rule amendment. The use of 77 GHz is key to introducing Toyota's new safety applications in the U.S. (i.e. full range ACC and rear PCS); however, the FCC currently prohibits the use of the spectrum in a stationary vehicle due to human tolerance concerns. TMA is now gathering further background, as well as waiting for GM feedback on its experience (GM petitioned the rule over a decade ago).

**FCC Spectrum Policy Summit** – TMA-DC attended the summit, which discussed the use of 700 MHz for public safety, as 700 MHz will be available for the public sector in Feb '09 (as mandated by Congress). It is apparent that the public-private partnership proposed by Frontline in response to the 9th NPRM is key to constructing the public safety spectrum (i.e. dedicated 24MHz of the 700 MHz band.). The panel discussed the necessity for establishing a national strategy, cooperation among regions, the use of commercial technology, and increased funding. The final rule is expected to be issued around the end of June.

**ITS America Annual Meeting** – TMC IT/ITS Planning Division, TEMA and TMA attended the annual meeting in California, where USDOT officials from NHTSA, FHWA, and ITS JPO echoed the importance of implementing ITS to improve safety, mobility and productivity. The major obstacle is how to fund the infrastructure, especially now that DOT is promoting its new \$100 M congestion initiatives. It was also notable that the 700 MHz issue was raised during the sessions, as FCC plans to issue a final rule in the end of June.

**ITS Japan visits TMA** – ITS Japan (Senior VP Mr. Sakamoto, Director Mr. Kubo and Ms. Mori) visited TMA to discuss current ITS activity in Japan and the U.S. ITS Japan, a counterpart of ITS America, is chaired by Dr. Toyoda and comprised of assigned staff from various private sectors to facilitate communications with public sectors and promote ITS Research and Development as well as international cooperation.

### **III. Quality/Compliance Issues**

**NHTSA Investigation on Lexus ES350 All Weather Floor Mats** – TMA submitted the response to NHTSA's inquiry regarding the Lexus ES350 All Weather Floor Mat investigation. In the

response is Toyota's position regarding the installation of more than one floor mat stacked in the driver footwell. Toyota has received complaints from owners of 38 vehicles regarding unintended acceleration. Eight crashes were reported to have occurred. Some owners noted that more than one floor mat was installed in the driver footwell at the time of the incident. It is unclear, and Toyota cannot determine, if the dealers or the customers are installing more than one floor mat in the vehicle at the same time. Toyota began an owner notification last month in order to remind owners not to install more than one floor mat at the same time and has modified the mat to enlarge the warning that is already embossed on the front side. In addition, the retail packaging now includes a hang tag that attaches through the clip hole, to be removed by the owner prior to installation.

**Early Warning Reporting (EWR) – Death Inquiry (DI)** — TMA submitted the response to the Death Inquiry letter (DI07-051) we received from NHTSA. The inquiry requests additional information on five of the fatal incidents reported in the fourth quarter of 2006 EWR submission.

**Early Warning Reporting (EWR) – Quarterly Submissions** —TMA submitted the 1<sup>st</sup> Quarter 2007 submission data, including aggregate, death and injury, and copies of non-dealer field reports. Two previous quarterly submissions of Death and Injury data, two quarters of aggregate data, and one quarter's field report submission were updated.

**Peer Vehicle IR - GM Trailer Hitches** – TMA requested and received an extension of the due date of the peer vehicle IR for PE07-025, and investigation into alleged hitch receiver failure in certain Model Year (MY) 2002 C/K 2500 SUV's and Pickup's. The response is now due July 9.

**Foreign Recall Report – Camry Headlamp Switch** - TMA submitted a Foreign Recall Report (FRR) regarding an issue with certain Toyota Camry vehicles built at Toyota Motor Corporation Australia (TMCA). The subject vehicles are substantially similar to the U.S. market Toyota Camry, Camry Solara, Avalon, and Lexus ES300, ES330, ES350 vehicles. However, the issue is limited only to right hand drive vehicles built at TMCA, which are not imported into the US. There are 158,652 vehicles included in this campaign. Due to a problem with oxide buildup, there is a possibility that the headlamp switch may cause the headlamps to flicker or become inoperative intermittently.

**Foreign Recall Report – Vios Suspension** –TMA submitted a Foreign Recall Report (FRR) regarding an issue with certain Toyota Vios vehicles built at Assembly Services Sdn. Bhd. [“ASSB”] for the Malaysian market. The subject vehicles are substantially similar to the U.S. market Toyota Echo, Yaris and Scion xA and xB vehicles. However, the issue is limited only to vehicles built at ASSB, which are not imported into the US. Due to insufficient tightening torque, the nut that secures the front suspension lower ball joint to the steering knuckle may loosen. There are 73,791 vehicles included in this campaign.

**Compliance Tests - 2007 MY FMVSS 208 AF05 Unbelted Compliance Tests** – NHTSA conducted FMVSS 208 compliance tests for the Camry, Yaris, and Prius at MGA Research in Burlington, WI. Each vehicle was tested in the 25 mph unbelted 5th female frontal barrier test. Results from all three tests indicate that the vehicles comply with the regulation.

**Discussion with NHTSA on Tundra Camshafts** – Due to confusion from media reports on the Tundra camshaft failures, NHTSA contacted TMA for information on the Toyota “recall”. After explaining that no recall is underway, NHTSA informed us that they will be meeting internally to discuss the issue, given that they believe ‘stalling’ could potentially be safety related, and so they plan to monitor their database.

#### IV. Assessment

**Scion xA Frontal Offset IIHS Rating** – IIHS released the Scion xA Frontal Offset Impact Rating based on their verification procedure, which was “Good” as expected.

**IIHS Letter on Roof Crush Study** – TMA-DC received a letter from IIHS on its plans for research on roof crush/rollover, where the Institute is attempting to make field data/crashworthiness comparisons to 216 roof strength performance. IIHS has chosen several SUVs with field rollover incidents (including the 99MY 4Runner), and are running roof crush testing to support their research. IIHS also has asked TMA some questions about our roof strength/performance. TMA is currently communicating with TMS-legal for an official response.

**IIHS TSP Rating Result Released** - The Saab 9-3 and Volvo C70 earned the IIHS's Top Safety Pick Award, which was from a group of tested convertibles. IIHS further announced that the Hyundai Santa Fe has received their Top Safety Pick Award as well (based on manufacturers voluntarily testing).

**NHTSA Frontal and Side NCAP Tests – 2008 MY Scion xB** – TMA attended the front and side NCAP tests of the 2008 MY Scion xB at Karco in Adelanto, CA on June 13th. For the side test, preliminary results indicate that the vehicle will receive a 5 star rating for both the driver and rear passenger. For the frontal test, the results indicate a 4 star rating for both the driver and front passenger. The frontal results were not as expected by TMC, so TMA has negotiated a 1 week hold on release of the results and obtained the test data for TMC to review.

**NHTSA Stars on Cars Information** - TMA received the first official vehicle rating from NHTSA. The 2007 MY Toyota Matrix will receive a 5 star rating for the driver and 4 star rating for the front passenger in the frontal NCAP test. It will receive a 5 star rating for the driver and a 4 star rating for the rear passenger in the side test on vehicles equipped with side airbags. Apparently, GM paid for an optional test of the Pontiac Vibe with side airbags, which prompted this notification. The vehicle will also receive a 4 star rollover rating.

#### V. Research

**Alliance 2008 Preliminary Research Proposals Circulated for Review** – In accordance with the Alliance budgeting process for fiscal year 2008, the Alliance Safety Research Subcommittee (SRS) circulated two human subject research proposals for review and comment by SRS members. The first proposal intends to conduct lateral sled tests to determine thoracic and abdominal response corridors for use in developing new, more accurate injury risk curves for side impact dummies. The second intends to characterize the response of the head/neck complex to direct loading in comparison to available crash test dummies. Toyota will provide its input at a late June SRS meeting.

**Alcohol Interlock Technology Blue Ribbon Panel; TMA C. Tinto to Represent Toyota** – TMA-DC met Dr. Sue Ferguson (IIHS, retired), the intended chairperson for the expert panel to develop alcohol interlock technology, funded jointly by the Alliance and NHTSA. TMA affirmed Toyota's commitment to the initiative and advised Dr. Ferguson that the organizational structure, inherent intellectual property issues, and patent designations should be established before officially beginning work. TMA, with support from GM, will recommend a business model

based in part on the industry consortium to develop human body models. Chris Tinto of TMA was invited to join the expert advisory panel, which will hold its first meeting July 17, 2007.

**NHTSA Upgrades NASS Format; TMA Attends Training Session** – The Alliance sponsored a NASS training session on the new XML data format for NASS-CDS, focusing on accessing the new online viewer website and importing CDS data for analysis. TMA notes that the new website is more manageable and easier to navigate, however, there are limitations to using the data. At this time, NHTSA has provided only 2004 and 2005 CDS cases/data in XML format, but plans to provide all future cases in this format.

**CIREN Vehicle Information Assistance; NHTSA Requests** – TMA responded to NHTSA requests for information on the introduction of advanced technologies in certain Toyota vehicles to assist with analysis of a CIREN case. TMA-DC recommended to NHTSA that, in the future, NHTSA should collect a standard set of information from all manufacturers so that the CIREN centers are knowledgeable about the most current available occupant protection technologies. NHTSA will filter center requests in the future to determine if global information needs exist.

**TMA Sponsorship - Ohio State University Injury Biomechanics Symposium**– The 3rd annual installment of this symposium showcased current biomechanics and human injury tolerance research efforts by students. The symposium continues to attract a wide audience of students, researchers, vehicle manufacturers, suppliers, ATD manufacturers, and NHTSA/VRTC representatives. Toyota was acknowledged for its sponsorship of the symposium dinner.



## **VI. Competitor/Media**

**Intelligent Vehicle Safety Report** – Frost & Sullivan, a leading marketing company, summarized the market trends of the major driving assistance systems, including blind spot detection, lane departure warning, and night vision. The night vision system has the highest rate of the revenue growth at 31.1% (2007-2012), followed by the blind spot technology at the rate of 29.2% (2006-2012).

**Active Safety Article** – *USA Today* reported the NHTSA's new proposal to include crash avoidance technologies in NCAP, which gives extra credit to vehicles with ESC, lane departure warnings and rear-end collision avoidance systems. According to the article, IIHS will likely advocate lane-departure warning systems, such as BMW's vibrating steering wheel and Mercedes' vibrating seats, when its study on the systems is finished this summer.

**MADD Urges Congressional Action** - MADD issued a press release to demand immediate Congressional action to make alcohol ignition interlock mandatory for all convicted drunk drivers in response to NHTSA's preliminary FARS data, which reported alcohol-related fatalities increased by 2.4% from 17,525 in 2005 to 17,941 in 2006 – an all time high since 1992. Overall traffic fatalities and fatality rate per 100 million VMT are down by 0.3% (43,443 to 43,400) and down to 1.44 (1.45 in 2005), respectively.

## **VII. NHTSA Interpretations**

**Wesport Power, Inc.**  
FMVSS 304 - Fuel Container Integrity

Addresses implementation of a small accumulator vessel as a pressure damping device and not a storage device.

[http://dmses.dot.gov/docimages/pdf101/467038\\_web.pdf](http://dmses.dot.gov/docimages/pdf101/467038_web.pdf)

**Kongsberg Automotive France**

FMVSS 302 - Flammability of Interior Materials

Addresses whether cables and electrical harnesses under the front passenger/driver seat are to be tested regarding flammability.

[http://dmses.dot.gov/docimages/pdf101/467041\\_web.pdf](http://dmses.dot.gov/docimages/pdf101/467041_web.pdf)

**Koito Manufacturing Co., Ltd.**

FMVSS 108 - Lamps, Reflective Devices, and Associated Equipment

Explains how one would determine the “optical axis” for a LED lower beam headlamp.

[http://dmses.dot.gov/docimages/pdf101/471852\\_web.pdf](http://dmses.dot.gov/docimages/pdf101/471852_web.pdf)